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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,956	01/22/2001	Shoichi Kiyomoto	47225	1364
20454	7590	08/23/2005		
JEFFREY C. LEW 2205 SILVERSIDE ROAD WILMINGTON, DE 19810			EXAMINER FIELDS, COURTNEY D	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 08/23/2005 .

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/766,956

Applicant(s)

KIYOMOTO, SHOICHI

Examiner

Courtney D. Fields

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 5-11 are pending.

#### ***Response to Arguments***

2. Applicant's arguments filed 06 June 2005 have been fully considered but they are not persuasive.

3. Referring to the rejection of claim 5, the Applicant contends and argues that the prior art Tomko does not disclose nor suggest information to be transmitted is encrypted with a encryption key based on a configuration derived from the first person-sender's fingerprint nor use the enrollee's fingerprint to encrypt the profile data.

The Examiner respectfully disagrees and asserts that Tomko discloses a method for secure handling of data for a database of biometric representation and associated data. The biometric is an individual's fingerprint. The individual is enrolled for an entitlement. The fingerprint entry is stored in a database and is encoded with the information within the enrollee's fingerprint. Each fingerprint entry has a data profile that is associated with the encoded enrollee's fingerprint, encrypted with a random unique key. This encryption key is double encrypted with a second encryption key. The encrypted data profile in addition to, the two encrypted keys are stored in the database that was encoded by the input of the enrollee's fingerprint. (See Column 3, lines 52-57, Column 4, lines 1-37)

Furthermore, Tomko discloses a secure method for tampering by preventing unauthorized users from seeing authorized user's fingerprint information. The profile data is encoded by the enrollee's fingerprint in which authorized users can use a smart card (storing a private key) and a PIN (encoded with enrollee's fingerprint) in order to

Art Unit: 2137

decrypt and retrieve the data profile for authorized users. Therefore, if the users are unauthorized, they will be unable to forge or duplicate an individual's fingerprint because they do not have access to the encoded profile data which is stored within the fingerprint entry of the database. (See Column 4, lines 38-60)

4. Therefore, the rejection of claims 5-11 are maintained in view of the reasons above and in view of the reasons below.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomko (U.S. Patent No. 5,790,668). As per 5, Tomko discloses a method of securely transmitting comprising the steps of providing information to be transmitted from a first person to a second person, obtaining a sender fingerprint of the first person and a receiver fingerprint of a second person, each fingerprint having ridge endings and bifurcations (collectively called "minutia), identifying a first configuration and a second configuration, each configuration respectively comprising positions of a plurality of the ridge endings and bifurcations (collectively called "minutia) in a planar system of coordinates superimposed onto the sender fingerprint and the receiver fingerprint, the first person using the first configuration to create a first encoding key to encrypt the information thereby forming a first cryptogram, the first person delivering the first

Art Unit: 2137

encoding key to a key control system independent of the first person and the second person, the second person using the second configuration to create a second encoding key, the second person delivering the second encoding key to the key control system, the first person transmitting the first cryptogram to the key control system, the key control system decrypting the first cryptogram using the first encoding key as a decoding key to obtain a copy of the information, the key control system encrypting the copy using the second encoding key as an encoding key and thereby forming a second cryptogram, the key control system transmitting the second cryptogram to the second person, and the second person decrypting the second cryptogram using the second encoding key as an decoding key in Column 3, lines 52-67, Column 4, lines 1-7, lines 52-67, Column 5, lines 1-67, Column 6, lines 1-25.

As per claim 6, Tomko discloses the claimed limitation wherein before transmitting the first cryptogram to the key control system over a first route of transmission comprises the first person authenticating that the first route of transmission is secure from tampering in Column 4, lines 23-51.

As per claim 7, Tomko discloses the claimed limitation wherein authenticating step comprises returning the first encoding key from the key control system to the first person and comparing the returned first encoding key with the first encoding key which had been delivered to the key control system by the first person in Column 5, lines 6-31.

As per claim 8, Tomko discloses the claimed limitation wherein before transmitting the second cryptogram to the second person over a second route of transmission

Art Unit: 2137

comprises the second person authenticating that the second route of transmission is secure from tampering in Column 5, lines 2-5, 32-42.

As per claim 9, Tomko discloses the claimed limitation wherein authenticating step comprises returning the second encoding key from the key control system to the second person and comparing the returned second encoding key with the second encoding key which had been delivered to the key control system by the second person in Column 5, lines 42-67, Column 6, lines 1-6.

As per claim 10, Tomko discloses the claimed limitation wherein the step of the key control system storing the first encoding key and the second encoding key in separate digital storage media in Column 4, lines 54-62.

As per claim 11, Tomko discloses the claimed limitation wherein the separate digital storage media include a non-rewritable electrical circuit in Column 3, lines 13-20.

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2137

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
cdf

August 11, 2005

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER